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ABSTRACT

This group of studies investigated the level of traditionality/flexibility in the sex-role attitudes of 376 six- and nine-year-old children, and in the attitudes of their parents. Sex-role questionnaires assessed: (1) the child's attitudes regarding toy and activity preferences, future domestic aspirations, occupational choices, and tolerance of atraditional children and adults; (2) the child's perceptions of his parents' preferences and expectations for him, and of the parents' behaviors as role models; (3) the child's perceptions of peer expectations of him; (4) the child's role model preferences in various media; (5) parent attitudes regarding toy, activity, media, and occupational choices for their child and parent behavior regarding domestic activities. In general, results indicated that: the children's sex-role attitudes were fairly stereotyped; older children's perceptions of peer expectations and media preferences were more stereotyped than those of younger children; older children perceived their parents to be more flexible in sex-role orientation than younger children did; and girls' perceptions were generally more flexible than boys' perceptions. The most significant predictors of a child's present and future sex-role orientation were peer influence and media influence, respectively. Children's perceptions of their parents' attitudes and behavior were not significantly related to the actual parents' scores. Parental attitudes and reported behaviors revealed a less traditional pattern than those perceived by their children. (Author/SS)

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Detailed Findings of NIMH Grant No. 29417

"Correlates of Sex-Role Flexibility in Children"

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Boulder, Colorado

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I. PERIOD COVERED

This report covers work done between June 1, 1977 and March 31, 1980. The research project is supported by NIMH Grant No. 29417 and is entitled, "Correlates of Sex-Role Flexibility in Children".

II. SUMMARY

The studies described herein investigated the self-reported sex-role attitudes and behaviors of 376 six- and nine-year old children, together with the varying social influences presumed to affect such behaviors. Mothers and fathers of many of the children were also assessed as to their sex-role socialization practices and attitudes.

The results of this survey reveal that most children begin elementary school with fairly stereotyped sex-role orientations, although variability in the degree to which traditionality is endorsed clearly exists. Girls exhibited more flexibility than boys with regard to toy, activity, and occupational choices and were more tolerant towards others doing cross-sex activities. Third grade girls appeared less stereotyped than kindergarten girls in most domains. In contrast, older boys were less flexible than younger ones in most of these areas. The correlations between areas were fairly low, indicating that flexibility in one area is not predictive of flexibility in others. Factor analyses revealed the presence of two factors, one labeled "present sex-role orientation" and the other labeled "future sex-role expectations".

The influence scales included the children's perceptions of parental practices, peers, and media choices. Analysis of these scales revealed some interesting patterns. The peer and media influence scales elicited significantly more stereotyped responses from older than younger children. The parental influence scale, however, was associated with an age trend in the opposite direction (i.e., older children perceived their parents to be more flexible than younger children did). Girls' perceptions of all three areas were more flexible than boys'.

The most significant predictor of a child's present sex-role orientation was peer influence. The flexibility of children's future expectations was best predicted by media choices. Patterns of correlates differed somewhat for the various domains and for the two age groups. What emerges from the children's survey, thus, is the notion that sex-role orientation is not a unitary construct, but one which should be more finely differentiated than has been the case. The domains included in the construct, moreover, appear to be influenced by different socialization factors.

The parental interview data with regard to their sex-role socialization practices and attitudes revealed a less traditional pattern than their children's. Parents of kindergarten children were less traditional than those of third graders (in contrast to the children's perceptions), and parents of daughters were more flexible than parents of sons (in accordance with the children's perceptions). The information about parents given by the children was not, for the most part, significantly related to the actual parents' scores. Some significant relationships were found, however, with both the actual and perceived parental ratings and some portions of the child's flexibility ratings, although correlations with peer and media influences tended to be higher than either of these. Correlations were highest in father-daughter and mother-son dyads, suggesting that cross-sex influence may be stronger at these ages. Parental self-descriptions regarding androgyny (as measured by the Bem Sex Role Inventory) were only marginally related to their own or their child's sex-role flexibility, although parental attitudes towards women's roles in society (as measured by the Spence Attitudes Toward Women Scale) were somewhat related both to the flexibility of parental socialization practices and to several domains of their children's flexibility.

The diverse findings of this investigation with regard to both children and their families are both complex and unique. The information obtained appears to confirm the utility of a multidimensional approach to the sex roles area.

III. DETAILED REPORT

The objectives of the research described in this progress report were: (i) to apply a multivariate approach to the study of sex-role flexibility in children, (ii) to identify patterns of sex-role traditionality and/or flexibility in two developmental groups (six- and nine-year old children, and (iii) to examine the influences which affect these various patterns.

A. Sample Characteristics

The population tested consisted of 376 elementary school children, with 156 in kindergarten and 220 at the third grade level. There were 181 girls and 195 boys. Children were drawn from seven different schools in three districts in the Boulder-Denver area. The districts differed somewhat with respect to socioeconomic level, although the majority of the sample came from middle-class homes and were predominantly Caucasian. In addition to the child sample, interviews about sex-role attitudes and socialization practices were also conducted with 221 mothers and 137 fathers of these children. Parents were also asked to fill out the Attitude Towards Women Scale (Spence & Helmreich, 1972) and the Bem Sex Role Inventory (Bem, 1974), and additionally were asked to describe their child using the adjectives of the Bem Sex Role Inventory. For 134 of the children, both fathers and mothers were interviewed. Responses of children with two participating parents did not differ significantly from those with one or no parents participating. Most of the subsequent analyses describing parental patterns, therefore, have been conducted using the two-parent sample.

On the basis of the biographical information, the parent sample may be described as follows: fathers were 36 years old on the average, and mothers were 35 (the standard deviation for both groups was 5). Eighty-five percent of the sample were married at the time of testing. Mothers were first married at 22 years of age, fathers at 24 (S.D. = 2 years). Average years of schooling completed by fathers and mothers were 16 and 15, respectively. The socioeconomic level of the

parents in the sample was assessed using the 1970 U.S. Census scale. This scale ranges from 1 to 8, with 1 representing the highest SES rating. The mean SES of the fathers was 2.05 (S.D. = 1.76). The average SES on this scale for the mothers who were working at the time of testing (N = 68) was 2.57 (S.D. = 1.94).

B. Measures Employed with Children

The first stage of the program consisted of individually assessing all participating children with a battery of scales which were developed for this project. Sex-role attitudes, behaviors, and their social correlates were measured with a variety of instruments including structured interview questions, pictures of male and female adults engaged in stereotypical and atypical behavior, and films of children participating in atypical activities.

The child's sex-role questionnaire addressed itself to six domains which were assumed to describe the degree of sex-role flexibility in children and three areas of social influence hypothesized to affect the child's level of traditionality/flexibility. The areas included are described below.

1. Child's Sex-Role Flexibility

   a. Toy preferences: These were responses elicited by questions about favorite toys which were subsequently rated for traditionality.

   b. Activity preferences: This scale consisted of both open-ended questions about favorite activities and forced-choice questions about whether or not the child would participate in cross-sexed activities.

   c. Future domestic aspirations: This scale consisted of items asking what tasks the children expected to perform in their homes as adults (e.g., cook, take out garbage, take care of children).

   d. Occupational choices: This scale included both open-ended and forced-choice questions about work expectations and specific job preferences.

   e. Tolerance towards atraditional children: Short films were shown which depicted, for example, boys doing needlepoint and girls engaged in a

chemistry experiment. The model shown in the film was approximately two years older than the mean age of the subjects. Children's responses were assessed by means of a social distance scale.

f. Tolerance towards atraditional adults: The format for this subscale involved choosing the preferred of two pictures of adults, one engaged in a traditional activity and the other engaged in a non-traditional domestic activity. There were ten paired pictures, half depicting female and half depicting male characters. This scale has previously been used by Schwager (1976).

2. Child's Report of External Social Influences

a. Parents: This domain was divided into three sub-areas:

(1) Parent toy and activity preferences for their children. This sub-area included questions about whether children thought their parents would purchase a cross-sex typed toy and would object to cross-sex typed activities. In addition, actual birthday and Christmas gifts parents purchased over the past year were elicited, and these were rated for traditionality.

(2) Parent as domestic role model. This sub-area consisted of questions about which parent does certain sex-typed tasks around their house (e.g., cooking, fixing things, house-cleaning).

(3) Parent occupational expectations for child. This sub-area tapped what the child's perceptions were of parental expectations regarding future work status and specific occupations (rated for traditionality).

b. Peers: This scale consisted of questions regarding anticipated reactions of their best friend if he or she wished to engage in activities traditionally associated with the opposite sex (e.g., baseball for girls, playing house for boys).

c. Media: These questions elicited open-ended responses about the child's favorite television shows and stars, movies, books, and comics. Role model choices were rated for sex of favorite character, with same-sex choices regarded as traditional and opposite sex as untraditional choices.

Items on each of the above scales were designed so responses could be scored on a continuum which ranged from 0 (most stereotyped) to 4 (most flexible). Inter-judge agreement with regard to scoring procedures ranged between 80 and 90 percent on all items. Specific procedures for ratings of the sample of responses obtained on open-ended questions are contained in Appendix D.

In addition to the sex-role flexibility and social influence instruments, children were also administered a self-image disparity test (Katz & Zigler, 1967) and a gender bias test (Zalk & Katz, 1978). The self-concept instrument consisted of 20 adjectives, rated for both self as perceived and self as idealized. This latter measure utilized 12 slides of children in social situations having either positive (e.g., winning a spelling contest) or negative (e.g., being reprimanded by teacher) outcomes. Children were asked to choose whether the males or females depicted in the slide would be recipients.

C. Measures Employed with Parents

The parent interview was individually administered to mothers and fathers at either their homes or offices. The specific questions used are contained in Appendix C. Parent data was organized conceptually along similar lines to the children's wherever possible. Questions tapped the following areas:

1. Parents' Toy Choices for Child

This scale consisted of questions about what toys mothers and fathers have bought their child (rated for traditionality) and forced-choice questions about their hypothetical reactions to children receiving cross-sexed toys.

2. Parents' Activity Choices for Child

This scale included both open-ended questions concerning activities preferred for their children (rated for traditionality) and forced-choice questions assessing their reactions to their child hypothetically engaged in cross-sexed activities.

3. Parent Domestic Activities

This scale included questions which tapped the amount of child care activities engaged in and how child care and working were combined.

4. Parent Occupational Choices for Child

This consisted of forced-choice questions assessing how parents would react to their child's decision to pursue sex-role atypical careers in the future. These were matched for SES to the degree possible (e.g., daughters becoming engineers, sons becoming home economics teachers).

5. Parents' Media Choices for Child

These were open-ended questions about the television shows and books preferred by mothers and fathers for their child. These choices were rated for traditionality.

The parental scales described above assessed reported socialization practices. In addition, parents completed a Bem Sex Role Inventory for themselves (to assess personality characteristics associated with masculinity and femininity) and a slightly modified version for their child. Attitudes towards female roles were assessed by means of the ten-item short form of the Spence Attitude Towards Women Scale. Demographic, work history, and the socioeconomic information was also obtained. Thus, there are four types of information obtained from each parent.

D. Teacher Measures

The kindergarten and third grade teachers at the seven schools were also invited to participate. Fifty-two teachers cooperated. Teachers filled out the Spence Attitude Towards Women Scale and the Bem Sex Role Inventory. No signi-

ficant correlations were obtained with these measures, and thus, they will not be discussed. A summary of all measures used is contained in Table 1.

E. Findings with Regard to Children's Sample

Results with regard to the children's sample will be summarized in terms of their relationship to four major questions: (1) Psychometrically, how was sex-role flexibility defined and what was its structure? (2) What were the ranges and distributions of these domains, and how did scores relate to gender and age? (3) How were perceived social influences related to the domains of sex-role flexibility?, and (4) How was sex-role flexibility related to other measures, such as self-concept ratings? These will be discussed below.

1. What Are the Psychometric Characteristics of Sex-Role Flexibility?

It should be recalled that items were scored on a continuum ranging from most stereotyped (a score of 0) to most flexible (a score of 4). In subsequent statistical analyses, mean scores were used for each domain so that areas with differing numbers of items could be compared.

The original questionnaire contained sex-role questions in eight areas: toys, activities, future domestic expectations, occupational choices, tolerance towards children engaged in cross-sex activities, tolerance towards adults engaged in cross-sex activities, opinions about sex equality, and personality traits. The latter two were excluded from the analysis because of statistical unreliability. Reliabilities for the remaining six areas are presented in Table 2.

It should be noted that reliability estimates were dependent on the format of the question. As might be expected, forced-choice questions yielded somewhat higher statistical reliability than did open-ended ones. Conceptually, however, forced-choice items tended to tap extremes of cross-sex behavior, while the open-ended questions elicited more information about the child's typical preferences and behavior. Thus, whenever possible, both forced-choice and open-ended types

TABLE 1

Katz - Dunaif Study

Summary of Measures Used

I. CHILDREN (N = 376)

A. Domains of Sex-Role Flexibility

1. Toy preferences
2. Activity preferences
3. Tolerance towards children behaving untraditionally
4. Future domestic aspirations
5. Occupational choices
6. Tolerance for adults behaving untraditionally

B. Perceived Social Influences

1. Peers
2. Media
   a. T.V.
   b. Movies
   c. Comics
   d. Books
3. Parents
   a. Toy and activity preferences
   b. Occupational expectations
   c. As domestic role models

C. Other Measures

1. Self-concept
2. Gender bias

II. PARENTS (N = 221 mothers, 137 fathers)

A. Domains of Sex-Role Flexibility in Child-Rearing

1. Toy choices for child
2. Activity choices for child

TABLE 1 (Continued)

3. Domestic behavior (percent of child care)

4. Occupational choices for child

5. Media choices for child (T.V. and books)

B. Demographic Information (SES, Work History, Etc.)

C. Attitutes Toward Feminism (Spence Attitudes Toward Women Scale)

D. Degree of Androgyny (Bem, SRI)

III. TEACHERS

A. Attitudes Toward Feminism (Spence Attitudes Toward Women Scale)

B. Degree of Androgyny (Bem)

TABLE 2

Reliabilities of Children's Areas Measure

Sex-Role Flexibility Description of Areas Measured	Alpha	Split-Half, Corrected By Spearman-Brown Formula
Toys	.44	
Activities	.47	
Future Domestic Expectations	.46	
Occupational Choices	.45	
Tolerance Towards Cross-Sex Activities in Children	.59	
Tolerance Towards Cross-Sex Activities in Adults	.62	
Present Flexibility		.47
Future Flexibility		.67
Total Flexibility		.82

of questions were included in each area.

Our original expectation was that a total sex-role flexibility score could be constructed by summing across all sub-areas. It was assumed that if a child demonstrated flexibility in one area, he or she could be expected to do the same in others. The intercorrelations between scales are contained in Table 3. As can be seen, correlations between domains were relatively low. An orthogonal rotated factor analysis was performed on the domain scores. This analysis yielded two factors, with the first factor accounting for 33.2 percent and the second accounting for 19.5 percent of the variability. We have labeled the first factor "present orientation" of the child. This factor has significant factor loadings on toy and activity preferences and attitudes towards other children. We have labeled the second factor "future expectations". The second factor has significant loadings on the child's future domestic and occupational aspirations and his or her attitudes towards adults. These two factors were employed in many of the subsequent analyses to be discussed.

The implications of these findings upon earlier sex-role research bears mentioning. Most previous measures have been univariate in nature, reflecting the assumption that scores obtained in one area (e.g., toy preference) are reflective of a child's general sex-role orientation. This turns out not to be the case. Not only is it necessary to obtain a more differentiated picture for an accurate description, but as will be shown in later analyses, the effects of various influences themselves differ depending on which area of sex-role flexibility is being described.

2. What Were the Ranges and Distributions of Sex-Role Flexibility Scores?

The means and standard deviations obtained in all domains by the various groups are contained in Figure 1 (for girls) and Figure 2 (for boys). A multivariate analysis of variance performed on these scores revealed the

TABLE 3

Intercorrelations of Domains of Children's Flexibility

	Toys	Activities	Domestic Aspirations	Occupations	Child Tolerance	Adult Tolerance
Toys		.19**	.09*	.21**	.12*	.18**
Activities			-.02	.11*	.32**	.23**
Domestic Aspirations				.02	.02	.08*
Occupations					.22**	.45**
Child Tolerance						.34**
Adult Tolerance						

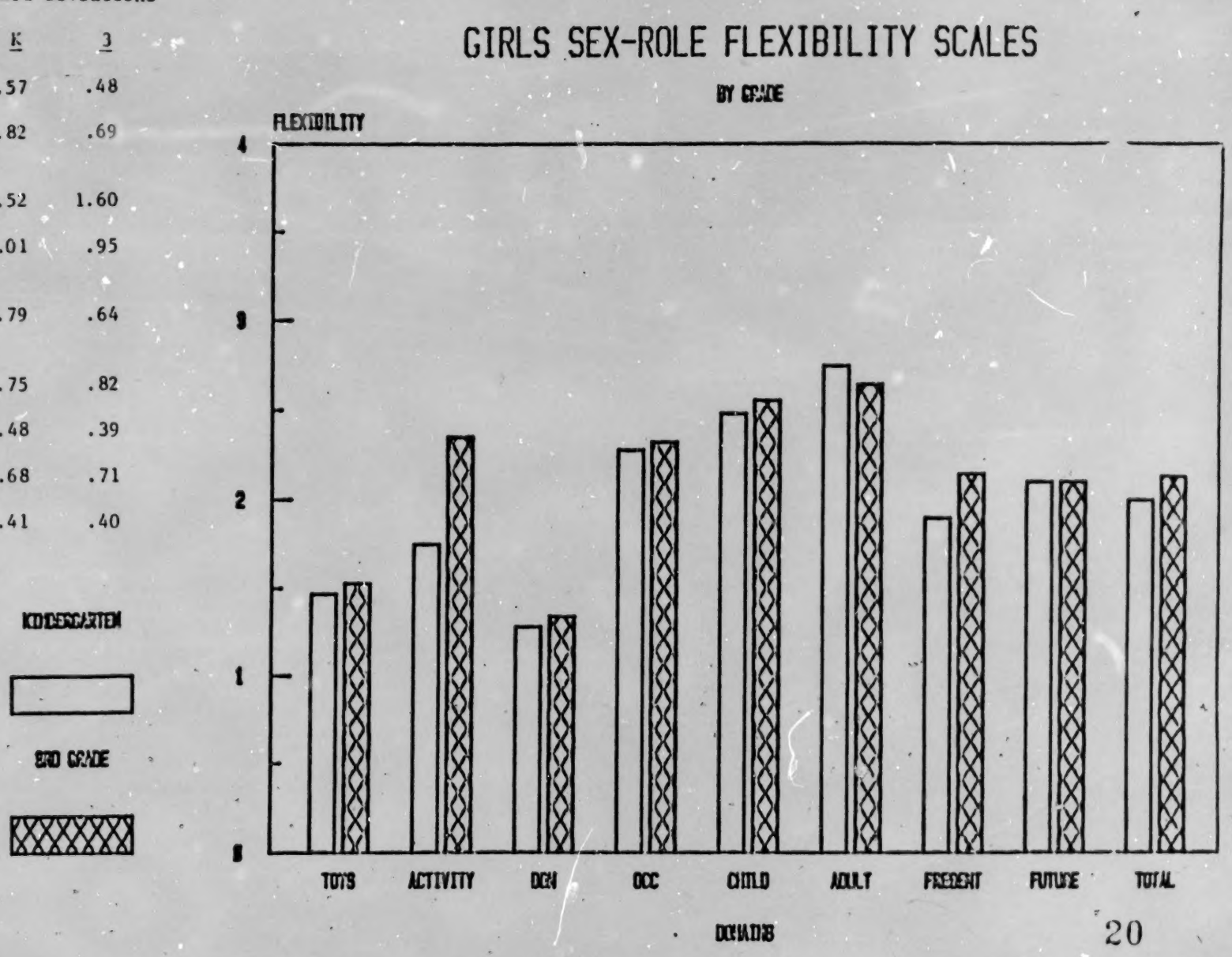
* $p < .05$

** $p < .01$

Standard Deviations

	K	3
Toys	.57	.48
Activities	.82	.69
Future Domestics	1.52	1.60
Occupations	1.01	.95
Tolerance Toward Child	.79	.64
Tolerance Toward Adult	.75	.82
Present	.48	.39
Future	.68	.71
Total	.41	.40

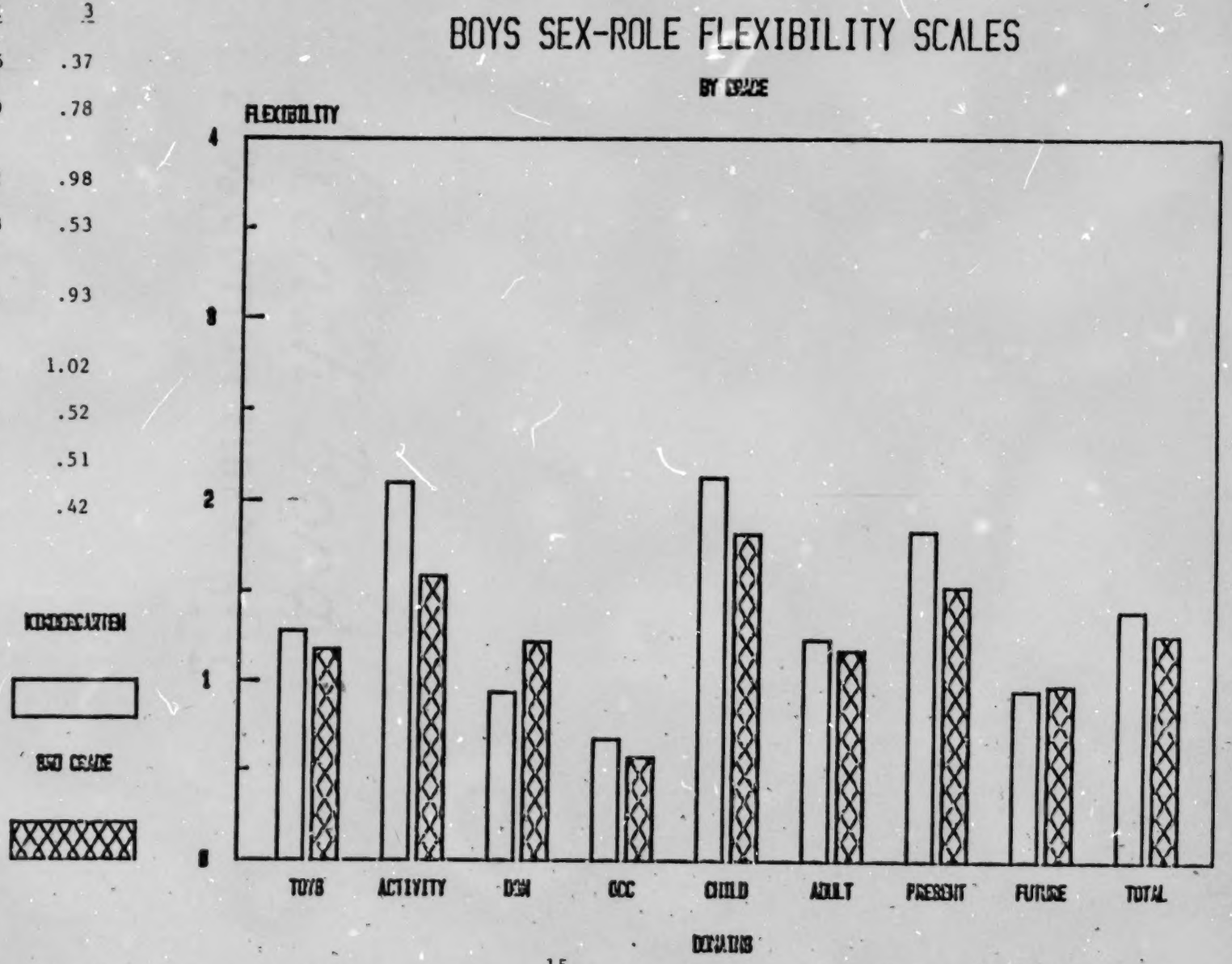
FIGURE 1



Standard Deviations

	K	3
Toys	.45	.37
Activities	.79	.78
Future Domestics	.92	.98
Occupations	.53	.53
Tolerance Toward Child	1.01	.93
Tolerance Toward Adult	.84	1.02
Present	.46	.52
Future	.42	.51
Total	.31	.42

Figure 2



overall effects of gender and the age by gender interaction to be statistically significant ($p < .01$ on both). Univariate analyses were significant for gender on all scales except domestic aspirations. Gender by grade interactions were significant for toy, activity, and occupation preferences. These interactions indicate that the third grade girls were more flexible on these scales than the kindergarten girls; whereas the age trends were in the reverse direction for boys. A repeated-measures analysis of variance revealed that future orientations were significantly more traditional than present ones ($p < .01$) for the sample as a whole.

In addition to the information that was entered into the domain scores, several additional pieces of information were obtained from the children which are of descriptive interest. They were asked about their knowledge of the women's liberation movement. Very few (15.2 percent) had any accurate ideas about this. Some thought it was a magazine or a television show. Others had no ideas about it and had never heard the term. They were also asked about their opinions concerning sexual equality and reasons for their opinion. As noted earlier in this report, the reliabilities were not sufficiently high to include these scores in the total flexibility score. Nevertheless, the frequency distributions obtained are of interest. Twenty-three percent of the girls feel that boys and girls should be treated equally, whereas 32 percent of the boys feel that both sexes should be allowed to do the same things. Thus, there does not seem to be any overwhelming sentiment for equality in young grade school children. The verbalizations of boys, in fact, seem to be more liberal than those of girls.

3. What Are the Correlates of Sex-Role Flexibility in Children?

The reliabilities and intercorrelations of the perceived social influence scales are contained in Table 4. As can be seen, these reliabilities are adequate for group testing purposes. The intercorrelations between the scales are fairly low, ranging from -.01 to .27, indicating that they are, indeed,

TABLE 4

Reliabilities of Perceived Social Influence Scales

Sphere of Influence	Split-Half Reliabilities, Corrected for Length by Spearman-Brown Formula
Media	.81
Peers	.74
Parent (combined)	.67
Parent Toy	.78
Parent Domestic	.49
Parent Occupation	.61

Means, Standard Deviations, and Intercorrelations of Perceived Social Influence Scales

Mean	S.D.		Media	Peers	Parent (combined)	Parent Toys	Parent Domestic	Parent Occupations
1.53	1.1	Media		.14*	.17**	.11*	-.03	.27**
1.90	1.6	Peers			.19**	.21**	.02	-.01
1.12	.5	Parent (combined)				.89**	.39**	.38**
1.83	1.3	Parent Toy					.10*	.04
.50	.5	Parent Domestic						.04
1.03	.5	Parent Occupation						

* p<.05
** p<.01

measuring separate areas. A factor analysis was performed on the perceived parent responses. Three factors emerged: perceived parental toy and activity preferences, perceived parental domestic behavior, and traditionality of parental occupational choices for their child. Subsequent analyses (discussed in more detail below) revealed that the combined parent influence score had lower correlations with children's scores than did the components. Thus, the components were used in most of the analyses. It should be noted that an absence of relationship between parents and children is a common finding in earlier sex-role research. Our findings suggest that these earlier findings are partially due to inadequate response differentiation which may have obscured some important relationships.

The section with regard to media choices included items dealing with television, movies, books, and comic books. A regression analysis conducted on these items revealed that movies and television contributed more heavily than did books and comic books. Nevertheless, they all contributed significantly and in the same direction (see Table 5). In terms of predictability, most variance was accounted for by the number of opposite sex characters the child chose as a favorite character in any of the 12 media choices he or she made. Ratings of theme and content emerged as less important in that they contributed less to the variability. Our final media score, therefore, was composed of the number of opposite-sex characters mentioned by the child, averaged across all media.

Interestingly, it should be noted that books and comic books elicited the most traditional choices, whereas television and movies elicited the least traditional. This finding was somewhat surprising in view of the fact that much has been written about the abundance of sex-role stereotypes portrayed on television. Our data suggests that television compares favorably to comic books as a source of stereotypy.

TABLE 5

SUMMARY OF INDIVIDUAL MEDIA INFLUENCES REGRESSED
AGAINST CHILDREN'S SEX-ROLE ORIENTATION
(Boys & Girls Combined)

PRESENT ORIENTATION	R	MULTIPLE R	R^2
1. Movies	.33	.33	.11
2. Television	.27	.35	.12
FUTURE ORIENTATION			
1. Movies	.61	.61	.38
2. Books	.52	.67	.45
3. Comics	.54	.69	.47
4. Television	.49	.70	.49
TOTAL ORIENTATION			
1. Movies	.62	.62	.38
2. Books	.50	.66	.43
3. Television	.50	.68	.46
4. Comics	.54	.69	.48

Regressions were performed in a step-wise fashion. Only influences which accounted for a significant amount of the variances are shown ($p < .01$). They are listed in the order they emerged.

The means on the various social influence scales for girls and boys are contained in Figures 3 and 4, respectively. A multivariate analysis of variance performed on these scales revealed the effects of gender, age, and the gender by age interaction to be significant (all at $p < .01$). The gender effect revealed that girls generally perceived all influences as more flexible than did boys. Significant univariate gender effects were obtained on all scales except perceived parental domestic chores. The direction of the grade differences obtained was not consistent. Media choices were more traditional for older than for younger children. All perceived parental influence scales, however, elicited an opposite age effect, i.e., greater flexibility perceived by the kindergarteners. The peer influence scale did not yield a significant grade effect, but the interaction of gender by grade was significant. This interaction reflects the finding that the older girls view their peers as being less traditional than younger girls do, whereas older boys view their friends as more traditional than their younger counterparts.

The relative flexibility scores on the various scales (presented in Figures 3 and 4) also yielded some surprising findings. The most traditional sub-scale is the perceived parental domestic activities scale. The combined parental influence scale elicited more traditional ratings than did either the media or peer scales. This is particularly interesting in view of the fact that the parents generally describe their practices as being fairly non-stereotyped. These differential levels of traditionality, combined with the differential age patterns obtained, suggest that the social influences that impinge upon the child in the sex-role area are far from uniform.

Step-wise regression analyses were performed in order to assess the relative contributions of each of the influence scales to the children's

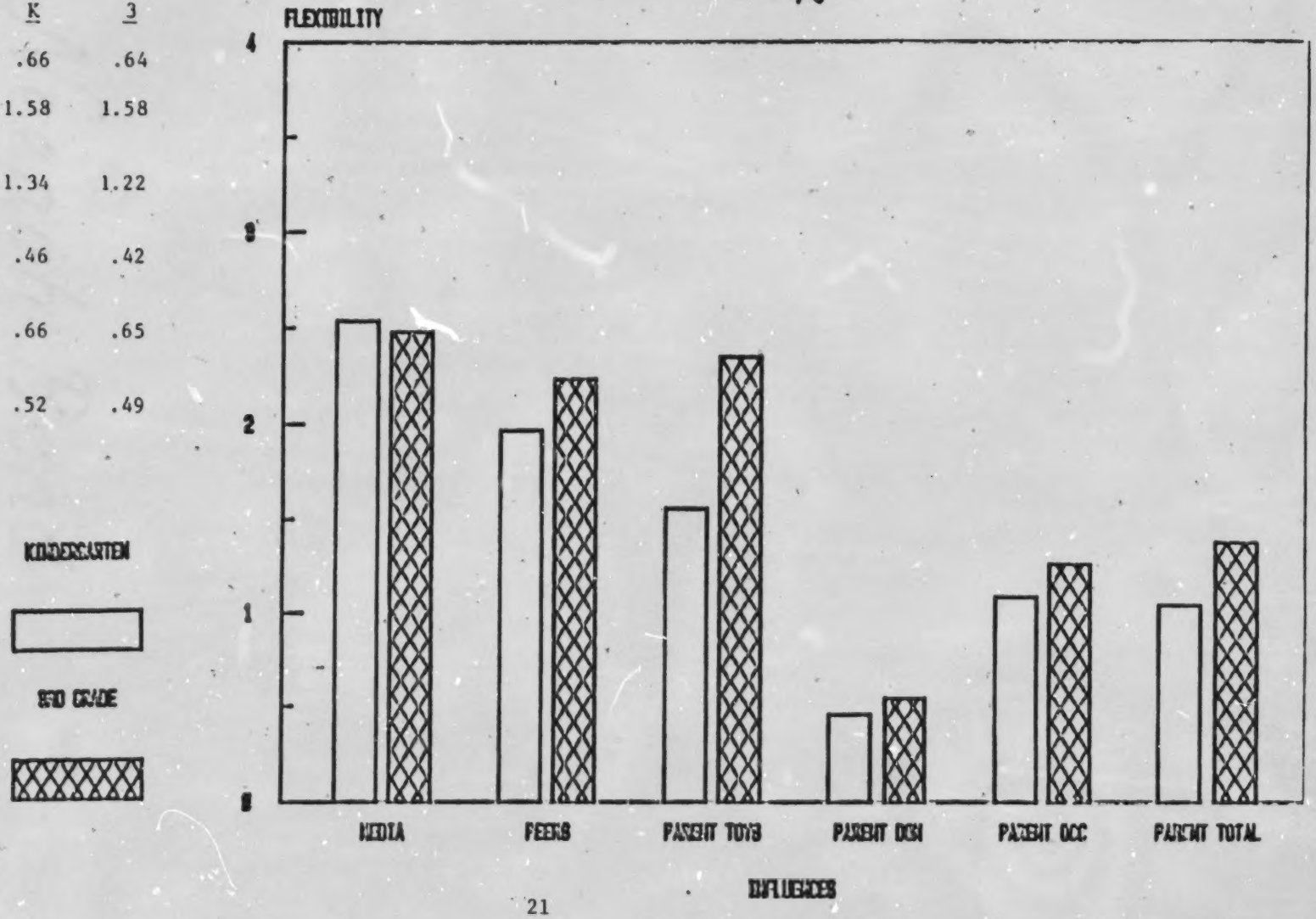
FIGURE 3

PERCEIVED SOCIAL INFLUENCE SCALES

GIRLS by grade

Standard Deviations

	K	3
Media	.66	.64
Peers	1.58	1.58
Parent Toy Choices	1.34	1.22
Parent Domestics	.46	.42
Parent Occupation	.66	.65
Parent (combined)	.52	.49

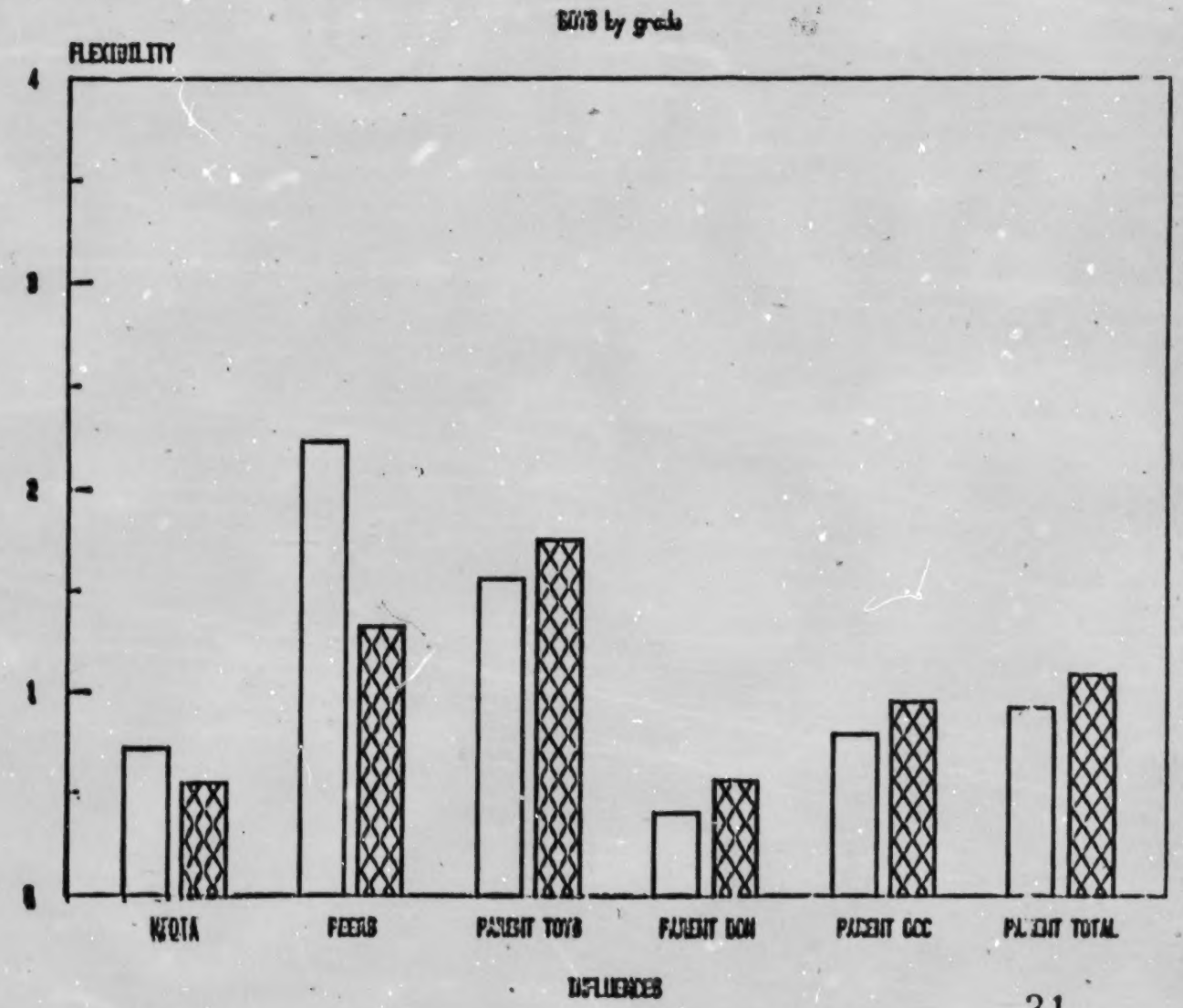


Standard Deviations

	K	3
Media	.45	.36
Peers	1.62	1.59
Parent Toy Choices	1.38	1.22
Parent Domestics	.43	.49
Parent Occupation	.30	.23
Parent (combined)	.50	.46

FIGURE 4

PERCEIVED SOCIAL INFLUENCE SCALES



sex-role domains. The results of these analyses are summarized in Table 6. As can be seen, the patterns differ across domains. Variability on the toy scale can be predicted significantly from children's scores on media choices and perceived parental toy choices. Scores on the activity scale were significantly predicted by peer influences and parental toy choices. There were no significant predictors of domestic aspirations. For the child's occupational choices, media and perceived parental occupational choices were significant predictors. Finally, for the two tolerance measures, media and peer influences predicted significantly. Thus, each area shows a different pattern of correlates.

The two factor scores, present and future orientations, were also analyzed by means of step-wise regressions. These findings also reveal the complexity of this area. Peer influence and parental toy choices appear to be most predictive of the child's present orientation scores. In contrast, media choices are the first and most significant predictor of future sex-role flexibility with perceived parental occupational choices being second.

The results of these analyses indicate that the children's self-reported social influence scales are predictive of variability in the various sex-role flexibility domains. It should also be noted that the total set of perceived social influence scales is capable of accounting for a fairly high percentage of variability in flexibility scores. For total flexibility scores, the combined set of perceived influences accounts for 52 percent of the variance ($R^2 = .52$). The pattern that emerges, however, is a complex one. Different factors influence the various domains in different ways. In general, however, peer and media influences appear to outweigh the effects of parents or, at least, as the children are perceiving them.

4. How Do Other Scores Relate to Children's Sex-Role Flexibility?

It can be recalled that measures of self-concept and gender bias were also administered to the children. These additional measures were included

TABLE 6

SUMMARY OF PERCEIVED SOCIAL INFLUENCES
REGRESSED AGAINST CHILDREN'S SEX-ROLE DOMAINS

		SIMPLE R	MULTIPLE R	R^2
I	TOY CHOICES			
	1. Media Choices	.28	.28	.08
	2. Parent Toy Choices for Child	.14	.30	.09
II	ACTIVITY CHOICES			
	1. Peer Influence	.58	.58	.33
	2. Parent Toy Choices	.25	.59	.35
III	FUTURE DOMESTIC EXPECTATIONS			
	No influences were significant			
IV	OCCUPATIONAL CHOICES			
	1. Media Choices	.66	.66	.44
	2. Parent Occupational Choices	.35	.69	.47
V	TOLERANCE TOWARDS CHILDREN ENGAGED IN CROSS-SEX ACTIVITIES			
	1. Media Choices	.30	.30	.09
	2. Peer Influence	.21	.35	.12
VI	TOLERANCE TOWARDS ADULTS ENGAGED IN CROSS-SEX ACTIVITIES			
	1. Media Choices	.59	.59	.35
	2. Peer Influence	.18	.60	.12
VII	PRESENT ORIENTATION			
	1. Peer Influence	.47	.47	.22
	2. Media Choices	.34	.55	.30
	3. Parent Toy Choices for Child	.24	.56	.31
VIII	FUTURE ORIENTATION			
	1. Media Choices	.60	.60	.37
	2. Parent Occupational Choices	.29	.62	.38

Regressions were performed in a stepwise fashion.
Only the influences which accounted for a significant amount of the variances are shown ($P < .01$). They are listed in the order they emerged.

to assess whether the newly constructed measures used in the present study were related to personality and sex-role questionnaires used in previous studies. The present findings revealed several significant relationships with both of these earlier measures, which are described below.

The gender bias scale had two types of items which depicted either negative or positive events (i.e., something good or something bad happening to the children). A positive correlation was obtained ($r = .17$, $p < .01$) between scores on the positive items and the children's present sex-role orientations. In terms of our scoring system, this means that the more flexible the child's present sex-role choices are, the greater the inclination to choose opposite-sex children as recipients of positive events (i.e., less gender bias). Sex-role flexibility then, appears to be related to lack of gender prejudice. A negative correlation, however, was obtained between scores on the negative types of gender bias items and the child's future sex-role orientations ($r = -.39$, $p < .01$). What this latter relationship signifies is that the children who are most flexible with regard to their future aspirations are also those who are least inclined to choose same-sex children as recipients of negative events (i.e., they exhibit higher degrees of gender pride).

It was possible to conduct similar types of analyses with the self-concept scale since this too was composed of negative and positive items (e.g., moody vs. happy). Children were instructed to rate these adjectives twice, first for whether they possessed the qualities (real-self), and secondly, for whether they wished to possess these qualities (ideal-self). A disparity score (the difference between the child's real and ideal self-concept) was computed for each child. It should be noted that internal consistancy of these disparity scores were very high for both positive and negative items (alpha = .99 for each), but there was little relationship

between the two ($r = -.05$, $p = .271$). The pattern of correlations obtained between the self-concept sub-scales and the sex-role questionnaires was similar to that described above with regard to gender bias. The child's disparity with regard to positive self-concept items correlated negatively with the child's present sex-role orientation ($r = -.21$, $p < .001$). In terms of our scoring system, this means that the more flexible the child's present orientation, the lower the disparity the child reports with regard to positive personality traits (i.e., he or she has more self-satisfaction). In contrast to this negative correlation, the disparity score with regard to negative self-concept items correlated positively with the child's future sex-role orientations ($r = .63$, $p < .05$). What this latter finding indicates is that children who exhibit more flexible future sex-role orientations are also those who attribute more negative adjectives to themselves.

There are several interpretations possible of this latter finding. The first, stemming from a Rogerian interpretation of self-concept is that the children whose future expectations are less traditional may also be more maladjusted. A second possibility, and one which the present investigators favor, is more in accordance with a cognitive-developmental view of self-concept (Katz and Zigler, 1967). These latter investigators have found that real/ideal disparity increases with age and that, in fact, older and/or more intelligent children show a greater willingness to say negative things about themselves. This trend has been interpreted as indicative of higher levels of social maturity. Thus, it could be argued that our subjects who were less stereotyped about their future roles were more mature than those who were more stereotyped.

To summarize these findings, we can say that flexibility in present sex-role orientation is related to both positive self-concept and lack of gender bias. Moreover, flexibility in future sex-role orientation is related to gender pride and maturity.

F. Findings with Regard to the Parent Sample

Discussion of the parent findings will be organized around four topics in a manner similar to the children's results. These four topics include: (1) a description of the levels of traditionality of socialization practices; (2) comparisons of the socialization practices of mothers and fathers; (3) comparisons involving sex of parent, sex of child, and grade of child; and (4) relationships between parental sex-role flexibility and other parental measures. All data comparing mothers and fathers is based upon a sample of 268 parents.

1. How Flexible Are the Parents?

All items on the parent questionnaire were coded so as to be comparable to the children's responses. Thus, the possible range for each item was from 0 (most traditional) to 4 (most innovative) with combined items averaged so that subtotals and totals all remained within the same range.

The parent data was organized, insofar as possible, along the same lines as the children's. Parental responses were scored with regard to toy, activity, domestic, occupational, and media preferences for their child. Reliabilities of the parents' sub-scales are contained in Table 7. The means of each sub-scale are presented in Table 8. It can be seen (by comparing Table 8 with Figures 1 and 2) that the mean values of the parents were higher (i.e., more flexible) than those of the child sample. As was the case with the children, however, there is clearly variability within the sample and across domains. Mothers are most traditional concerning future domestic behavior for their child. Fathers are most traditional in terms of media choices. Both parents are most flexible with regard to activity choices for their children.

2. How Do Mothers and Fathers Compare?

The correlations between mothers' and fathers' scores are presented in Table 8. It can be seen from this table that some agreement exists between

TABLE 7

Reliabilities of Parental Socialization Scales

	Split-Half Reliabilities (Corrected for Length by Spearman-Brown Formula)		
	Mother	Father	Combined
Toy Choices for Children	.73	.57	.66
Activity Choices for Children	.52	.64	.54
Domestic Behavior*			
Occupational Choices for Children	.82	.85	.83
Media Choices for Children	.91	.91	.92

* Too few items to calculate.

mother and fathers regarding their socialization practices. This agreement occurs in the areas of toy, occupational, and media choices but not with regard to activity choices. Moreover, parents show considerable (although not perfect) agreement on how household chores are divided.

There are a number of other significant correlations between the parents that are not included in the table. A few of the more salient ones included responses to the Attitudes Toward Women Scale ($r = .39$), the Bem Sex Role Inventory ($r = .42$), years of schooling ($r = .47$), descriptions of their child ($r = .22$), attitudes about discipline ($r = .63$), and about family planning ($r = .76$). When these data are considered in conjunction with Table 8, it would appear that mothers and fathers show greater correspondence on attitudinal factors and personality traits than they do in the self-reported socialization practices.

3. Are Sex and Age of Child Related to Parental Flexibility Scores?

A three-way multivariate analysis (sex of parent X sex of child X grade of child) was conducted on the various components of the parents' socialization flexibility scores. The gender of the child yielded statistically significant effects ($p < .01$), indicating that parents of daughters were more flexible than parents of sons (means of 2.49 vs. 2.28, respectively). Univariate gender effects were significant on parental toy and media choices for their children. It should be noted that this gender effect parallels the children's scores. Additional univariate analyses revealed a grade of child effect on media choices (more traditional for parents of third graders) and a sex of parent effect on media (mothers more flexible).

The mean scores of fathers and mothers on the various domains is presented in Figures 5 and 6. It can be seen that although there is some variability among areas, the scores in each domain are relatively high, indicating that the parents describe themselves as fairly non-stereotyped in their child-rearing practices. It is interesting to note (compare Figures

TABLE 8

Means on Parental Scales

	Mother	Father	Correlation Between Parents
Toy Choices	2.73	2.72	.21**
Activity Choices	3.43	3.34	.09
Domestic Behavior	1.80	2.02	.49**
Occupational Choices	2.13	2.14	.21**
Media Choices	2.05	1.33	.19*

* $p < .05$

** $p < .01$

FIGURE 5

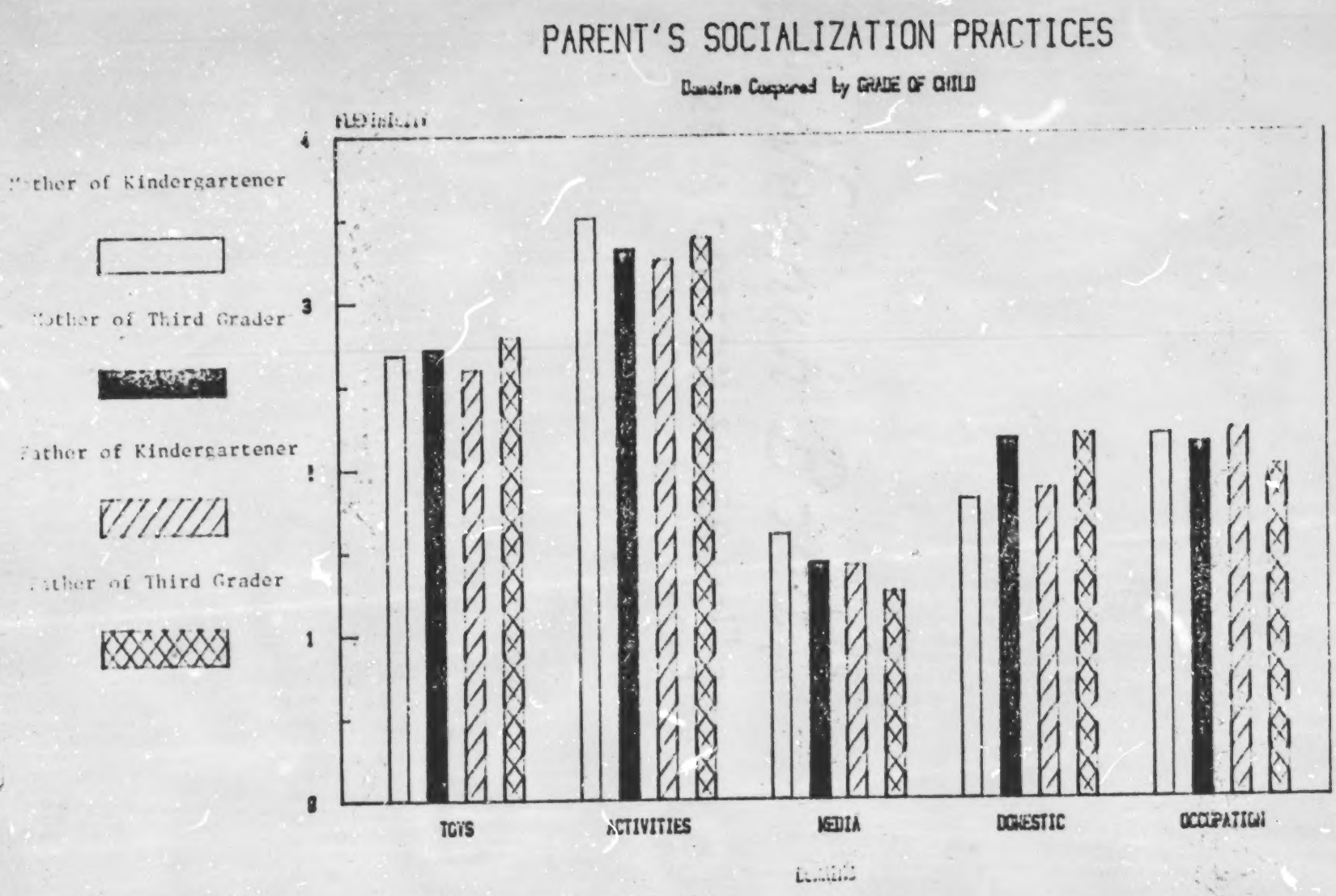
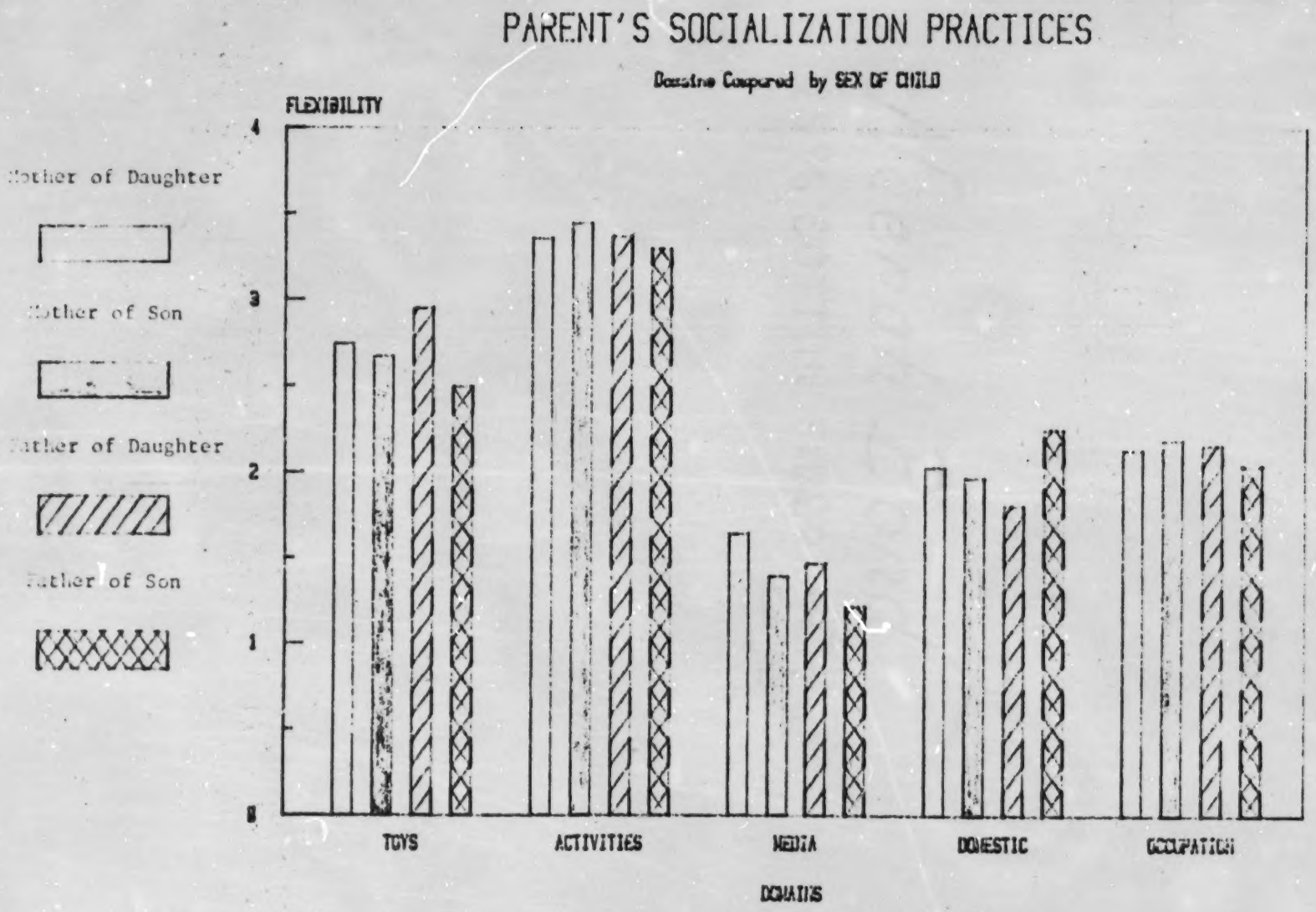

PARENT'S SOCIALIZATION PRACTICES
Domains Compared by GRADE OF CHILD
Mother of Kindergartener
Mother of Third Grader
Father of Kindergartener
Father of Third Grader
4
3
2
1
TOYS
ACTIVITIES
MEDIA
DOMESTIC
OCCUPATION

FIGURE 6


PARENT'S SOCIALIZATION PRACTICES
Practices Compared by SEX OF CHILD
FLEXIBILITY
4
3
2
1
0
Mother of Daughter
Mother of Son
Father of Daughter
Father of Son
TOYS
ACTIVITIES
MEDIA
DOMESTIC
OCCUPATION
DOMAINS

3 and 4 with Figures 5 and 6) that the children report that their parents are considerably more traditional in their socialization practices than do the parents themselves. This difference may be attributable either to: (a) parental desires to impress the interviewer with their flexibility, (b) with the children perceiving parental practices as more stereotyped than they are, or (c) both trends being present.

4. Are Parental Socialization Practices Related to Other Variables?

In addition to the items scored as part of the parental flexibility index, a considerable amount of other biographical and attitudinal information was obtained. Wherever possible, parallel questions were asked of fathers and mothers. A number of questions, however, were only pertinent to mothers (e.g., questions about combining pregnancy and work), and these were looked at separately.

Correlations between the demographic, attitudinal, and socialization practices of mothers and fathers are contained in Table 9. As can be seen, a number of these were significant. Attitudes towards feminism (as measured by the Spence scale) correlated significantly with mothers' present socialization practices and strongly with almost all of the fathers' scales. The Bem Sex Role Inventory and Attitude Towards Women scales correlated significantly in the fathers' sample ($r = .21$) but not in the mothers' sample. Fathers who shared in child care were more flexible in all areas of self-reported sex-role socialization. This latter finding was one of the strongest correlations obtained with parents.

In terms of demographic variables, age of parent correlated positively with maternal flexibility scores, but negatively with paternal ones. Amount of education was positively related to the flexibility of both parents' reported socialization practices with regard to the child's present activities. Degree of education was also related to the fathers' occupational choices for their child. Interestingly, parental perceived similarity to their own parents

TABLE 9

Relationship Between Parents' Socialization Practices

And Attitude and Deomgraphic Variables

	Bem Sex-Role Instrument								
MOTHERS' SELF-REPORT	Masculine Score	Feminine Score	Androgyny[1] Score	Spence ATW Scale	SES[2]	Work[3] Status	Years of Schooling	Age	Attitudes Toward Feminism
Toy Preference for Child	.08	-.26**	.00	.17*	-.02	.06	.19*	.03	.24
Activity Preference for Child	.08	-.18*	.00	.27**	.20	.00	.17*	-.02	.20
Domestic Expectations for Child	.14	.09	.09	-.00	-.06	.31**	.08	-.00	-.04
Occupational Choices for Child	.11	-.06	.05	.16*	.00	-.04	-.15*	.14*	.15*
Media Choices for Child	-.12	-.13	-.18*	.10	-.09	-.06	.03	.10	.03
Socialization of Child's Present Orientation	.10	-.28**	.00	.27**	.12	.04	.23**	.00	.27**
Socialization of Child's Future Orientation	.17*	.05	.10	.07	-.05	.24**	.00	.05	.03
Total Socialization Practices	.18*	.05	.08	.20**	.02	.21**	.13	.04	.16*
FATHERS' SELF-REPORT									
Toy Preference for Child	.03	-.04	-.12	.28**	-.03	n/a	.15*	.02	.06
Activity Preference for Child	.21	.07	.18*	.50**	.13	n/a	.09	-.07	.08
Domestic Expectations for Child	.06	.16*	.24**	.32**	.09	n/a	-.06	.03	.07
Occupational Choices for Child	.09	-.16*	.02	.56**	.08	n/a	.27**	-.05	.12
Media Choices for Child	.05	.14	-.10	.13	.06	n/a	.10	.13	-.04
Socialization of Child's Present Orientation	.12	.04	.04	.49**	.07	n/a	.15*	-.03	.08
Socialization of Child's Future Orientation	.08	.07	.21**	.45**	.10	n/a	.05	.01	.10
Total Socialization Practices	.11	.07	.18*	.56**	.11	n/a	.11	-.01	.11

[1]Bem scores were computed using the formula (M + F) - M - F to create a continuous variable for androgyny.

[2]The socioeconomic level was assessed using the 1970 U.S. Census scale, which ranges from 1 to 8, with 1 representing the highest SES rating.

[3]Work status was coded Ø for not working, 2 for part-time, and 4 for full-time employment.

(the child's grandparents) is also somewhat related to parental liberality. Whether or not a mother is presently working relates to several socialization and attitudinal factors, including her androgyny score, her attitude towards feminism, and her thoughts about the child's future endeavors.

To summarize, a number of variables are associated with parental self-reported socialization practices. Moreover, a certain degree of consistency exists in that flexibility in a variety of areas is related to both amount of education attained and positive attitudes towards feminism.

G. Findings with Regard to Teachers

The teacher data described in this section was based upon those available for the sample of 134 children who had both mothers and fathers cooperating in the study. Some caution is necessary in interpreting these results because of two methodological issues which were unavoidable and which affected results. First, there were groups of children tested who had the same teacher. The 134 children had 42 teachers who participated, and thus, it was necessary to duplicate each teacher's data several times (which decreased the variability). A second problem is that the teacher sample was disproportionately (90.5 percent) female. Although this is probably not atypical of the middle grade school population, the relative absence of male teachers made gender comparisons impractical and probably reduced the variability as well.

The male teacher sample was somewhat more androgynous than our father sample. As can be seen in the means below, both male and female teachers had slightly lower scores on the Attitudes Toward Women Scale. These differences could not be tested, however, because of the small number of male teachers.

	Bem Androgyny Score		Spence ATW Scale	
	$\bar{X}$	SD	$\bar{X}$	SD
Fathers	9.196	.967	4.86	.75
Mothers	9.324	1.085	4.99	.66
Male Teachers	10.189	1.33	4.76	.05
Female Teachers	9.437	.91	4.63	.27

Within the teacher group, the male teachers were more androgynous and pro-feminist than the female teachers. This may not be so surprising in a sample of men whose choice of occupation is relatively atypical. Although the sample of male teachers in this study was too small to assess their independent effect upon the students, it suggests the possibility that male teachers have more impact than females in terms of influencing children's sex-role attitudes.

The questionnaire scores of the teachers did not correlate significantly with the children's scores for the most part. Teacher ATW scores correlated negatively with grade, ($r = -.26$), indicating that the kindergarten group of teachers were more pro-feminist than the third grade ones. The only other significant correlation was obtained between the domestic aspiration scores of the girls and their teachers' ATW scores, and this was in a direction opposite than expected ($r = -.32$), i.e., those girls with more flexible attitudes in this area had teachers who were less favorable towards feminism.

The relative lack of correlation between teacher and student attitudes is in accordance with other literature. Kesselman (1974), for example, found few significant relationships between students and their teachers. This finding was repeated even after the teachers participated in a modification procedure which increased their awareness of sex-role stereotypes and significantly changed their sex-role orientations. Kesselman did find small but not significant correlations between post-treatment teachers and their female students, but no such relationship existed with the male pupils.

This relative absence of relationship is somewhat surprising in view of the large amount of variance accounted for by other social influences. It might be expected that an adult who spends so much time with the child should have a fairly significant impact. One possible explanation for the lack of correlation between teachers and their students in this study is to be found in the global nature of the measures used for teachers. It may be recalled that the perceived

parent measure, when averaged as a total score, also showed little relationship to the children, but stronger correlations emerged when the score was subdivided into domains. The same may be true for teachers (i.e., more response differentiation is needed). A second explanation is related to the previously discussed methodological problems which may have resulted in attenuation of the range of teacher scores, and consequently, in lower correlations. Substantively, it should be noted that relationships between teachers and students are always likely to be complex in view of the fact that teachers change every year. Thus, one would not expect the nature of this relationship to remain constant over time.

H. Relationships Between Children's Flexibility and Parental Socialization Practices

The correlations between the major components of the children's and parents' scales are presented in Table 10. In order to simplify these findings as much as possible, parental socialization practices were also divided into those that pertain to the present sex-role behaviors of the children (e.g., toy, activity, and media choices) and those that pertain to the future (e.g., occupational and domestic) expectations. It can be seen from this table that there are some statistically significant correlations between what the parents report about their sex-role socialization practices and their children's level of stereotypy. As can be seen, these are not overwhelmingly high. When the total sample is considered, the practices of the father that pertain to the present appear to correlate more highly than the practices of the mother. When the sex of child is considered, however, fathers' contributions are more apparent with their daughters. In contrast, mothers' practices correlated more highly with their son's flexibility scores. Interestingly, the father-daughter relationship is stronger with regard to the daughter's future expectations, whereas the mother-son relationship is more prominent with respect to present orientations.

The cross-sex effect obtained is not predictable from most social learning models since they ordinarily assume (particularly at the age levels tested) that

TABLE 10

Correlations Between Children & Parents Sub-Scales

	Mother			Father		
Total Population of Children	Present	Future	Total	Present	Future	Total
Present Sex-Role Orientation	.12†	.13†	.17*	.14*	-	-
Future Sex-Role Orientation	-	-	-	.21**	-	-
Total Sex-Role Orientation	-	-	-	.24**	-	-
Females						
Present Sex-Role Orientation	-	-	-	-	-	-
Future Sex-Role Orientation	-	-	-	-	.25*	.23*
Total Sex-Role Orientation	-	-	-	.18†	.18†	.21†
Males						
Present Sex-Role Orientation	.20*	-	.20*	-	-	-
Future Sex-Role Orientation	-	-	-	-	-.16†	-
Total Sex-Role Orientation	-	-	-	-	-	-

it is the same-sex parent that provides the major modeling stimulus. Biller (1974) has hypothesized that fathers play a more important role than mothers do in the sex-typing of their daughters, and our findings seem to corroborate this. It should be noted that there may be a difference between which parent provides the model for basic identity and which one sets the limits for cross-sex behavior. Our parent measure places more emphasis on the latter. An additional finding that merits notice is that the relationship between fathers and their sons, albeit weaker, goes in the opposite direction. Thus, fathers who are liberal tend to have more stereotyped sons.

A series of step-wise regression analyses were undertaken in order to ascertain the relative contributions of the socialization practices of mothers and fathers with greater specificity. The results for the combined sample can be found in Table 11. For the total sample, fathers' practices appear to have a slightly stronger effect than mothers'. In general, the range of variability in children's scores accounted for by any individual parent is between 5 percent and 14 percent (a statistically significant, but not extremely large effect).

The predictability of parental input is somewhat increased by looking at the male and female samples separately. The results of the regression analysis performed separately for boys and girls are contained in Table 12. It can be seen in this table that fathers' occupational and media choices for their daughters accounts for 27 percent (R^2) of the variability in their daughters' future sex-role orientation scores. In contrast, the highest R^2 obtained for boys was between their mothers' practices (principally occupational choices) and their son's present orientation (R^2=12). Thus, with regard to parental reported sex-role practices, one can summarize our findings as follows: (a) girls' scores are more highly related to their parents' than are boys; and (b) there appears to be a cross-sex effect such that girls' scores (particularly future orientations) are more strongly related to their fathers, whereas boys' scores (particularly present orientation) are more related to their mothers.

TABLE 11

Regression of Parental[1] Practices (Self-Reported)

Against Children's Flexibility Scores

TOTAL SAMPLE OF CHILDREN

A. Regressed Against Present Sex-Role Orientation:

SOURCE	MULTIPLE R	R^2	SIGNIFICANT
1. Father's toy choices for child	.25	.06	$p < .01$
2. Mother's toy choices for child	.37	.11	$p < .05$

B. Regressed Against Future Sex-Role Orientation:

1. Father's toy choices for child	.25	.06	$p < .01$
2. Mother's media choices for child	.30	.09	$p < .05$

C. Regressed Against Total Sex-Role Orientation:

1. Father's toy choices for child	.32	.11	$p < .001$
2. Mother's media choices for child	.39	.15	$p < .05$

[1]Mother's and father's entered step-wise to assess relative importance.

TABLE 12

Regression of Parental[1] Practices (Self-Reported)

Against Children's Flexibility Scores

FEMALES

A. Regressed Against Present Sex-Role Orientation:

SOURCE	MULTIPLE R	R^2	SIGNIFICANT
1. Mother's occupation choices for daughter	.27	.07	$p < .05$
B. Regressed Against Future Sex-Role Orientation:			
1. Father's occupation choices for daughter	.39	.15	$p < .01$
2. Father's media choices for daughter	.49	.23	$p < .05$
C. Regressed Against Total Sex-Role Orientation:			
	ns	ns	ns

MALES

A. Regressed Against Present Sex-Role Orientation:			
1. Mother's occupational choices for son	.26	.07	$p < .05$
B. Regressed Against Future Sex-Role Orientation:			
	ns	ns	ns
C. Regressed Against Total Sex-Role Orientation:			
1. Mother's occupational choices for son	.28	.08	$p < .05$

[1]Mother's and father's entered step-wise to assess relative importance.

In addition to the separate analyses by sex, we also looked at the patterns of parental influence associated with each age group. In general, the predictability is somewhat better for the third graders than for the kindergarten groups. At the younger age levels, the fathers' reported practices correlate more highly with children's scores than do mothers' (e.g., fathers account for 15 percent of total score variability vs. 1 percent for mothers). One exception to this trend occurs with regard to the children's present orientations, where maternal variables have more of an effect than paternal ones. For the younger group, the socialization scores of mothers account for 9 percent of the variability of children's present orientations as compared with 2 percent for fathers. For the third grade group, mothers' and fathers' scores, respectively, can account for 22 and 17 percent of the children's present orientation scores. Thus, for contemporary behaviors, parents are more significant influences for middle than beginning grade school children, and mothers appear to play a bigger role than fathers. These trends are reversed, however, for future orientations, where fathers' scores play a stronger role. Father variables account for 14 percent of the variability of kindergarteners' and 17 percent of the third graders' future scores. In contrast, mother variables account for 6 and 9 percent of the variability of the younger and older age groups, respectively.

Another question for consideration concerns how the parental variables affect each of the six different domains of sex-role flexibility for children. These data, comparing mother and father variables, are included in Table 13. It can be seen from the table that the results are not consistent across domains, either with regard to which parent is the most influential or to the content area of the parents' socialization. Toy choices of the children are related only to mothers' occupational choices. Children's activity choices can be significantly predicted by the traditionality of fathers' toy choices and mothers' media choices for the child. The

TABLE 13

Regression[1] of Mother and Father Variables

Against the Six Domains of Child Sex-Role Flexibility

	SOURCE	MULTIPLE R	R^2	SIGNIFICANCE
A.	Regressed Against Children's Toy Choices:			
	1. Mother's occupational choices for child	.20	.04	$p < .05$
B.	Regressed Against Children's Activity Choices:			
	1. Father's toy choices for child	.22	.05	$p < .05$
	2. Mother's media choices for child	.29	.08	$p < .05$
C.	Regressed Against Children's Domestic Expectations:			
	1. Father's activity choices for child	.22	.05	$p < .05$
D.	Regressed Against Children's Occupational Choices:			
	1. Father's toy choices for child	.24	.06	$p < .01$
E.	Regressed Against Children's Tolerance Towards Children Engaged in Cross-Sex Activities:			
	1. Father's toy choices for child	.29	.08	$p < .001$
	2. Mother's media choices for child	.35	.12	$p < .05$
	3. Father as domestic role model	.39	.15	$p < .05$
F.	Regressed Against Children's Tolerance Towards Adults Engaged in Cross-Sex Activities:			
	1. Mother's media choices for child	.28	.08	$p < .001$
	2. Father's toy choices for child	.36	.13	$p < .01$

[1]Regression done in step-wise fashion, only significant contributors shown.

child's future expectations in the domestic and occupational areas are related only to fathers' socialization practices. Finally, a child's tolerance towards others (both adults and children) is significantly predicted by a mix of mother and father variables with regard to media and toys. We can conclude from Table 14 that although parental input contributes to scores in complex ways, the magnitude of their contribution is not extensive. The range of variability accounted for in each of the six domains is from 4 to 15 percent.

Another question to be raised in this section is how other parental variables besides socialization practices relate to children's sex-role flexibility. Information relevant to this question is contained in Table 14 which shows correlations between children's scores and the practices of each parent, their socioeconomic level, their attitudes towards feminism, and the degree of androgyny on the Bem scale. It can be seen from this table that somewhat different patterns seem to be associated with mothers and fathers in terms of variables which correlate with their children's scores. Degree of androgyny in mothers almost reaches significance in correlating with both their sons' and daughter's future scores. The directionality of this correlation is the expected one (i.e., the more androgynous they are, the less stereotyped their children's expectations). The androgyny scores of fathers do not relate at all to their daughter's flexibility and relate in an opposite direction to their son's flexibility scores. This is clearly a puzzling finding and may be reflecting some negative modeling tendency between fathers and sons. Attitudes towards women held by mothers and fathers correlate only with daughter's scores, not son's. Moreover, they show contrasting patterns, depending upon whether we look at the child's present or future scores. Attitudes towards women correlate negatively with present but positively with future scores. The role of socioeconomic status is equally puzzling. Socioeconomic level of mothers was based upon their job or their husbands', if not working. SES of both parents is related to boy's scores in the expected direction. The higher the socioeconomic

TABLE 14

Relationships Between Parent Self-Report and Child's Sex-Role Flexibility By Sex

	Girls			Boys		
	Present	Future	Total	Present	Future	Total
ACTUAL PARENT						
Mothers						
Present Sex-Role Socialization Practices	ns	.15†	.15†	.20*	ns	ns
Future Sex-Role Socialization Practices	.15†	ns	ns	ns	ns	ns
Total	ns	ns	ns	.20*	ns	ns
[1]Bem Sex-Role Inventory	ns	.17†	ns	ns	.14†	ns
Spence Attitude Towards Women Scale	-.28*	.26*	ns	ns	ns	ns
Socioeconomic Status	ns	.32†	.26†	-.37**	ns	-.20†
Fathers						
Present Sex-Role Socialization Practices	ns	ns	.18†	ns	ns	ns
Future Sex-Role Socialization Practices	ns	.25*	.18†	ns	-.16†	ns
Total	ns	.23*	.21*	ns	ns	ns
[1]Bem Sex-Role Inventory	ns	ns	ns	-.24*	-.23*	-.33**
Spence Attitude Towards Women Scale	-.16†	.29*	ns	ns	ns	ns
Socioeconomic Status	ns	ns	ns	-.24*	ns	-.20*

† Significance approached but not reached due to small N of cases.

* $p < .05$

** $p < .01$

[1]Bem scores were computed using the formula (M + F) - M - F to create a continuous variable for androgyny. (Heilbrun and Pitman, in press).

score, the more flexible the child. (The negative correlation simply reflects the fact that the U.S. Census scale goes from 1, highest SES, to 7, lowest.) In contrast, the socioeconomic level of fathers has no impact upon their daughters, and mothers' SES level correlates with daughter scores in the reverse direction (i.e., lower SES mothers have more flexible daughters). The most comprehensive thing that can be said for this pattern of findings is that it underscores the need for looking at both fathers and mothers and assessing their effects individually upon their children.

A final question to be considered in this section has to do with the degree to which a mother's work status affects her children's flexibility scores. Previous research (e.g., Hoffman & Nye, 1975; Marantz & Mansfield, 1977) has shown that a mother's working status has a fairly substantial positive impact on their daughter's career expectations, particularly in adolescents. We did not find this to be uniformly true for the present sample. Correlations between the actual work status of the mother and her son's or daughter's sex-role flexibility scores were not significant. Several other variables, relevant to the mother's work and child care experience did, however, correlate with children's scores. The flexibility of a mother's <u>reasons</u> for working correlated highly ($r = .42$) with her daughter's total sex role ($r = .34$ with present, .20 with future). The presence of future job plans in the non-working mother's group also correlated positively with their daughter's future scores ($r = .29$). None of the work status variables correlate significantly with boys' scores, which does substantiate some of the earlier findings previously alluded to. What does correlate positively with sons' scores is the amount of time the mother spends engaged in child care. The less time she spends, the more flexible her son's scores are on all components ($r = .38$ with present, .33 with future, and .46 with total). Interestingly, this variable also correlates positively with daughters' future scores ($r = .24$) but negatively with daughters' present scores ($r = -.48$). What this latter finding suggests is that when the

mother is heavily engaged in child care, she is presenting a traditional future model for her daughter to follow. Perhaps what is being reflected in the boys' scores is the fact that if a mother spends less time engaged in child care, it is probable that the father is spending more. A final maternal variable conceptually related to working is whether or not the mother had a child during the early phases of her marriage. Mothers who have children within the first two years of marriage have children who are more traditional than mothers who wait for longer periods of time before having children.

In order to further explore the work status variable, three-way analyses of variance were conducted (mother's work status X grade of child X sex of child) on the various components of the children's flexibility scores. Work status in these analyses was categorized into three groups: full-time, part-time, or not working. The only significant effect to emerge relevant to work status was a three-way interaction with regard to future orientations ($F_{1,126} = 6.27$, $p = .014$). The means involved in this interaction are shown below.

Sex of Child	Grade	Work Status of Mother		
		Not Working	Part-Time	Full-Time
Daughters	Kindergarten	2.07	2.04	1.95
	Third Grade	1.60	1.74	1.79
Sons	Kindergarten	.64	.84	.78
	Third Grade	.92	.27	.77

What this table suggests is that the effects of a mother's work status differs with regard to both the age and sex of her child. A mother's work status has very little effect on kindergarten daughters, but third grade daughters of non-working mothers have more traditional future expectations. The effect of mother's work status on sons is more complex. Non-working mothers have somewhat more traditional sons when they are in kindergarten than the other two groups. At the third

grade level, however, non-working mothers have the least traditional sons, whereas part-time working mothers have the most traditional. It should be noted, of course, that none of the main effects of mothers' work status were significant so, once again, we are obtaining complex and unanticipated findings.

I. The Relative Contribution of Actual and Perceived Influences

The question can be raised as to whether children are more affected by adult descriptions about their social environment or their own perceptions of what other people do. This question is particularly salient to the present project because children's ratings of their parents' practices and parental reports about these same practices do not agree with each other very well, even in the same area of content. These correlations are contained in Table 15. Fortunately, we are in a good position to assess the relative effects of these two, since we have both. The parental self-reports are referred to as "actual" parents, and the child's report of parental practices is referred to as "perceived".

The relatively low degree of concordance raises several interesting questions. It is clear that we do not know how parents "actually" behave with regard to their children, for we may be getting distortion along several lines. The first possibility is that parents are attempting to appear more flexible than they actually are, perhaps in an attempt to supply the interviewer with what they regard as a socially desirable response. Another possibility is that younger children are not very accurate reporters about their parents and/or their perceptions may be distorted by their own fairly stereotyped beliefs and practices. Since the first two possibilities are not mutually exclusive, a third possibility is that both types of distortion are occurring. This problem is not soluble on the basis of our existing data sice we have no observational data against which to check. Both sources of information need to be taken into account in order to determin their relative effects on children's sex-role orientation. For this reason, therefore, we performed a series of step-wise regression

TABLE 15

CORRELATIONS OF ACTUAL AND PERCEIVED INFLUENCES

PARENT'S SELF-REPORT	CHILD' PERCEPTIONS					
Mother	Parent Toy Choices	Parent Domestic Model	Parent Occupational Preferences	Parent Total	Media Influences	Peer Influences
Toy Choice for Child	-.00	.06	-.00	.01	-.07	.02
Activity Choice for Child	.07	-.01	-.14	.01	-.04	.03
Domestic Expectations for Child	-.02	.11	-.07	-.00	.04	-.03
Occupational Choice for Child	.13	.07	-.10	.10	-.03	.13
Media Choice for Child	.07	.06	.04	.10	.20*	.24**
Father						
Toy Choice for Child	.18*	.03	.16*	.21**	.27**	.07
Activity Choice for Child	.07	.07	.03	.09	.04	.01
Domestic Expectations for Child	-.15*	.07	-.09	-.14	-.12	.06
Occupational Choice for Child	.11	.14	.13	.18*	.06	.14
Media Choice for Child	.09	.04	.09	.12	.16*	.15*

*$p < .05$ **$p < .01$

analyses which included both perceived and actual social environment influences in order to ascertain their relative importance. Some of the results relevant to this issue are presented in Table 16.

For present orientations, six factors emerged as significant predictors. As a set, they account for 48 percent of the variance. Peer influence (perceived) emerges as the most significant predictor. The others, in declining order of importance, include fathers' toy choices, perceived parental toy choices, media, mothers' occupational choices for child, and fathers' occupational choices for the child. Thus, the predictors include both perceived (peer, media, and parent) and actual (parental toy and parental media choices) sources.

In contrast to present orientations, only two variables emerged as significant predictors of future sex-role orientations. There were the child's choice of media characters and mothers' toy choices. Together these predict 50 percent of the variance with media being the strongest correlate.

The effects of the various influences on children's total sex-role scores were also examined. Four significant predictors emerged from this analysis. In descending order of importance, these include: media, peers, mothers' toy choices, and perceived parental toy choices. Taken together, this latter set of variables accounts for 60 percent of the variability in total sex-role flexibility scores. Once again, both perceived and actual influences appear to be playing a role, but the perceived ones are more salient.

Step-wise regression analyses were also performed separately for boys and girls and for the two grade levels. The results relevant to gender are contained in Table 17. The set of predictors does not differ that much for boys and girls (other than the cross-sex parent effect for present orientations previously discussed). What does emerge, however, is the fact that boys' scores appear to be less predictable than the girls'. This is especially true for future orientations where only 2 percent of the variance is accounted for by one set of variables for

TABLE 16

Regressions[1] of Perceived[2] and Actual[3] Influences Against Children's Flexibility Scores for Combined Sample

SOURCE	MULTIPLE R	R^2	SIGNIFICANCE
A. Regressed Against Child's Present Sex-Role Orientation:			
1. Peer influence[2]	.59	.35	$p < .001$
2. Father's toy choice for child[3]	.62	.39	$p < .01$
3. Perceived parents' toy choices[2]	.67	.41	$p < .05$
4. Media influence[2]	.66	.43	$p < .05$
5. Mother's occupational choices for child	.67	.45	$p < .05$
6. Father's occupational choices for child	.69	.48	$p < .05$
B. Regressed Against Child's Future Sex-Role Orientation:			
1. Media influence[2]	.67	.46	$p < .001$
2. Mother's toy choices for child[3]	.69	.47	$p < .05$
C. Regressed Against Child's Total Sex-Role Orientation:			
1. Media influence[2]	.65	.42	$p < .001$
2. Peer influence[3]	.73	.53	$p < .001$
3. Mother's toy choices for child[3]	.75	.56	$p < .01$
4. Perceived parent toy choices[2]	.76	.57	$p < .05$

[1]The following 15 scale scores were entered in a step-wise fashion to assess their relative importance: mother's toy, activity, domestic, occupation, and media choices for her child; father's toy, activity, domestic, occupation, and media choices for his child; child's perception of peer influence, media influence, and parent's toy, domestic and occupational choices for them. Only the significant contributors are shown.

[2]As perceived by the child.

[3]As reported by parent.

TABLE 17

Regressions[1] of Perceived[2] and Actual[3] Influences Against Children's Flexibility Scores For Girls & Boys Separately

	SOURCE	MULTIPLE R	R^2	SIGNIFICANCE
I. GIRLS				
A. Regressed Against Girl's Present Sex-Role Orientation:				
1.	Peer influence[2]	.44	.20	$p < .001$
2.	Father's occupational choices for daughter	.50	.25	ns
3.	Father's toy choices for daughter	.59	.35	$p < .01$
B. Regressed Against Girl's Future Sex-Role Orientation:				
1.	Father's occupational choices for daughter	.39	.15	$p < .01$
2.	Father's media choices for daughter	.48	.23	$p < .05$
C. Regressed Against Girl's Total Sex-Role Orientation:				
1.	Peer influence[2]	.54	.30	$p < .001$
2.	Mother's toy choices for daughter[3]	.61	.37	$p < .05$
3.	Father's media choices for daughter[3]	.65	.43	$p < .01$
II. BOYS				
A. Regressed Against Boy's Present Sex-Role Orientation:				
1.	Peer influence[2]	.67	.45	$p < .001$
2.	Perceived parent toy choices[2]	.70	.49	$p < .05$
B. Regressed Against Boy's Future Sex-Role Orientation:				
1.	Father's media choices for son[3]	.15	.02	ns
C. Regressed Against Boy's Total Sex-Role Orientation:				
1.	Peer influence[2]	.47	.22	$p < .001$
2.	Mother's occupational choices for son	.52	.27	$p < .05$

See Table 16 for footnotes.

boys in contrast to 23 percent predictability for the girls along this dimension.

Some grade differences in predictability were also obtained. Results of regression analyses done separately for the kindergarten and third grades are contained in Table 18. For kindergarteners, 60 percent of the variability in future orientation is accounted for as contrasted with 38 percent for the older children. In contrast, predictability for present orientations was better for the older than the younger group (12 percent vs. 38 percent). As can be seen in Table 18, the patterns of predictors are somewhat different for the two age levels, but many similarities are apparent. Peer and media influences appear primary on all when they appear. Moreover, a greater number of influences emerge as significant predictors of present orientations than of future ones. Finally, the set of predictor variables used accounts in all cases for a sizable proportion of variance, ranging from 38 percent to 64 percent. These figures are quite high in social science research and are particularly high for the sex-roles area.

A final bit of data to be presented in this section are the summaries of regression analyses conducted for each of the four age-sex categories. These results are presented in Table 19. What is most interesting about these analyses is that the breakdown into the separate groups further improves our predictability. Thus, our set of predictors can account for 74 percent of the total sex-role flexibility scores of kindergarten girls and 60 percent of the same for kindergarten boys. The best predictability for third grade girls occurs with regard to present orientations, where 71 percent was accounted for by our set of predictor variables. The figure for third grade boys was quite comparable, with 70 percent of the variability accounted for. In general, predictability of scores is somewhat worse for kindergarteners. In no event, however, does our aggregate set account for less than 38 percent of the variability, and in most cases the figure is higher than 50 percent. We feel encouraged by these figures.

Not all aspects of the patterns obtained were predictable in advance, although the importance of peers and media relative to parents was predicted and was

TABLE 18

Regressions[1] of Perceived[2] and Actual[3] Influences Against Children's Flexibility Scores for Kindergarteners & Third Graders

SOURCE	MULTIPLE R	R^2	SIGNIFICANCE
I. KINDERGARTENERS			
A. Regressed Against Kindergarteners Present Sex-Role Orientation:			
1. Peer influence[2]	.58	.33	$p < .001$
2. Father's toy choices for child[3]	.62	.38	$p < .05$
B. Regressed Against Kindergarteners Future Sex-Role Orientation:			
1. Media influence[2]	.74	.55	$p < .001$
2. Perceived parent occupational choices[2]	.77	.60	$p < .05$
C. Regressed Against Kindergarteners Total Sex-Role Orientation:			
1. Media influence[2]	.65	.42	$p < .001$
2. Peer influence[2]	.71	.51	$p < .01$
3. Perceived parent toy choices[3]	.74	.54	$p < .05$
II. THIRD GRADERS			
A. Regressed Against Third Graders Present Sex-Role Orientation:			
1. Peer influence[2]	.62	.39	$p < .001$
2. Media influence[2]	.69	.48	$p < .001$
3. Mother's toy choice for child[3]	.75	.57	$p < .001$
4. Mother's occupational choice for child[3]	.77	.60	$p < .05$
5. Father's activity choice for child[3]	.79	.62	$p < .05$
B. Regressed Against Third Graders Future Sex-Role Orientation:			
1. Media influence[2]	.62	.38	$p < .001$
C. Regressed Against Third Graders Total Sex-Role Orientation:			
1. Media influence[2]	.65	.42	$p < .001$
2. Peer influence[2]	.74	.55	$p < .001$
3. Mother's toy choice for child[3]	.78	.61	$p < .001$
4. Perceived parent domestic role model[2]	.80	.64	$p < .05$

See Table 16 for footnotes.

TABLE 19

Regressions of Perceived & Actual Influences
Against Children's Sex-Role Orientation
(By Sex and Grade)

I. GIRLS

		SIMPLE R	MULTIPLE R	R^2
A.	Kindergarten Girls' Present Orientation:			
	1. Peer Influence	.50	.50	.25
	2. Father's Toy Choice for His Child	.23	.63	.40
	3. Father's Occupation Choice for His Child	-.16	.75	.56
B.	Kindergarten Girls' Future Orientation:			
	1. Peer Influence	.44	.44	.19
	2. Perceived Parent Toy Choices	.37	.58	.33
C.	Kindergarten Girls' Total Orientations:			
	1. Peer Influence	.64	.64	.41
D.	Third Grade Girls' Present Orientation:			
	1. Peer Influence	.47	.47	.22
	2. Mothers' Toy Choice for Her Child	.31	.57	.33
	3. Father's Activity Choice for His Child	-.20	.66	.44
	4. Mothers' Activity Choice for Her Child	.25	.72	.52
E.	Third Grade Girls' Future Orientation:			
	1. Fathers' Occupation Choices for His Child	.42	.42	.18
F.	Third Grade Girls' Total Orientation:			
	1. Mothers' Toy Choices for Her Child	.50	.50	.25
	2. Peer Influence	.49	.71	.51

TABLE 19

Continued

Regressions of Perceived & Actual Influences

Against Children's Sex-Role Orientation

(By Sex and Grade)

II. BOYS

	SIMPLE R	MULTIPLE R	R^2
A. Kindergarten Boys' Present Orientation			
1. Peer Influence	.60	.60	.36
2. Perceived Parents' Toy Choices	.40	.70	.49
B. Kindergarten Boys' Future Orientation			
1. Peer Influence	-.39	.39	.15
C. Kindergarten Boys' Total Orientation			
1. Perceived Parents' Toy Choices	.47	.47	.22
2. Peer Influence	.37	.58	.34
3. Fathers' Domestic Expectations for His Child	-.29	.67	.45
D. Third Grade Boys' Present Orientation			
1. Peer Influence	.66	.66	.44
2. Mothers' Occupational Choice for Her Child	.24	.70	.48
3. Media Influence	-.16	.73	.54
E. Third Grade Boys' Future Orientation			
1. Fathers' Media Choices for His Child	.34	.34	.12
2. Mothers' Occupational Choice for Her Child	.31	.56	.31

basically corroborated. It would appear from the results presented in this section that there is also considerable support for a multivariate model. The pattern of predictors varies somewhat from group to group, but some of these variations were in accordance with the expectations generated by our model. Although the complexity of these patterns may be staggering, it is clear that many sources of social influence contribute to the process of sex-role development. Taken in the aggregate, these influences (both perceived and actual) have a substantial amount of explanatory power.

J. What Are the Dimensions Which Differentiate Highly Sex-Typed From More Flexible Children?

In order to answer this question, several discriminant function analyses were conducted on the children's data. The groups was trichotomized into those of high, average, or low flexibility with regard to present, future, and total flexibility scores. In these discriminant analyses, we were interested in learning which variables maximally discriminated the upper and lower thirds of the population in terms of flexibility.

Findings with regard to the discriminant function analyses on the combined sample are summarized in Table 20. There were fifteen predictor variables employed in each of the analyses. They included the following: children's perceptions of their parents' choices for them in the realms of toys, domestic activities, and occupational choices; mothers' actual choices for children in the domains of toys, activities, media, domestic and occupational aspirations; fathers' actual choices along these same lines; and children's scores on the peer and media scales.

The upper and lower thirds of the children's present orientation were maximally discriminated by a set of the seven variables summarized in Table 20. They are listed in descending order of importance. This standardized canonical discriminant function is associated with an eigenvalue of .93, a canonical correlation of .69, a Wilks Lambda of .52, and a Chi-square of 55.62. It can

TABLE 20

Summary of Discriminant Function Analyses

Present Orientations:

Standardized Canonical Discriminant Function Coefficients

VARIABLE	FUNCTION 1
Peers	.86
Father's Activity Preferences	-.43
Child's Perceptions of Parental Domestic Activities	.41
Mother's Occupational Choices for Child	.40
Mother's Media Choices for Child	-.30

This function correctly classifies subjects into upper and lower thirds 87 percent of the time.

Future Orientations:

Standardized Canonical Discriminant Function Coefficients

VARIABLE	FUNCTION 1
Media	1.01
Mother's Toy Choices	.32
Child's Perceptions of Parents' Occupational Choices	.31
Father's Toy Choices	.28
Father's Activity Choices	-.21
Child's Perceptions of Parental Domestic Activities	.18
Father's Media Choices	.16
Mother's Domestic Aspirations for Child	-.14

This function correctly classifies subjects into upper and lower thirds 97 percent of the time.

TABLE 20

Continued

Summary of Discriminant Function Analyses

Total Sex-Role Flexibility Scores:

Standardized Canonical Discriminant Function Coefficients

VARIABLE	FUNCTION 1
Media	1.01
Peers	.43
Mother's Activity Choices	-.38
Father's Toy Choices	.36
Father's Media Choices	-.28
Mother's Occupational Choices	.25
Mother's Domestic Aspirations	-.20
Child's Perceived Parent Toy Choices	.19
Child's Perceived Parent Domestic Expectations	.17
Father's Activity Choices	-.17

This set of variables correctly classifies subjects into upper and lower thirds 97 percent of the time.

successfully categorize those in the upper and lower thirds of the distribution 87 percent of the time. As can be seen, the peer scale is the strongest predictor, but other perceived and actual influences do play a role.

As can be seen in Table 20, future orientations can be successfully differentiated by a set of nine predictor variables, and total scores by a set of 10. The relevant statistics for the future orientations discriminant analysis include an eigenvalue of 2.85, a canonical correlation of .86, a Wilks Lambda of .259, and a Chi-square of 117.40. The corresponding values for the total score analysis are an eigenvalue of 2.54, a canonical correlation of .85, a Wilks Lambda of .282, and a Chi-square of 85.97. In both instances, the obtained discriminant function can correctly classify subjects into the upper and lower thirds 97 percent of the time.

What emerges from these findings is that the set of variables we have tapped is remarkably successful in terms of its capacity for distinguishing the more flexible from the more traditional children. Although peer and media influences play a dominating role, it is clear that parents' behaviors (both self-reported and child-perceived) also are contributing to the process.

K. Discussion and Conclusions

The present study investigated the parameters of sex-role flexibility in children. Although the concept of "androgyny" has been widely investigated in adult populations over the past decade (e.g., Bem, 1974; Spence, Helmreich & Stapp, 1974; Lenney, 1979), it has been very recent that sex-typing socialization of children has been questioned at all. Most earlier studies in this area have not only assumed that sex-typing was universal, but regarded deviation from this pattern as potentially pathological (e.g., Rosenberg, Sutton-Smith & Morgan, 1961).

Initial questioning of the need for rigid sex-typing has come mostly from the feminist movement (i.e., for example, Pogrebin, 1980), but a few social scientists have also begun to look at the ramifications of this issue. In a recent article, for example, Eron (1980) proposes that boys be socialized as girls are (i.e., encouraging the development of nurturant and sensitive qualities) in order to reduce aggression. Career training in schools is being urged more for girls in part under the impetus of Title IX. Moreover, several studies have attempted to experimentally modify sex-stereotyped behaviors of children (e.g., Serbin & Connor, 1979; Guttentag & Bray, 1976) with some degree of success. Considerable attention is also being paid to sexist portrayals in children's media and how to change them (cf. Butler & Parsley, 1980). Prior to the present study, however, information about the variability in children's sex-role orientations as they currently exist was simply not known.

One of the major purposes of the present study, therefore, was a descriptive one. We are now in a position to state that although beginning and middle grade school children are fairly traditional in terms of sex roles, variability in the degree of stereotypy displayed clearly exists along a number of dimensions.

Many of the expectations regarding the dimensions which relate to sex-role flexibility in children are based upon a theoretical model recently advanced by the principal investigator, (Katz, 1979) and thus, the model will be described

briefly before our findings are elaborated upon.

This model views the development of sex roles as a life span process in which different tasks are accomplished at various developmental levels, and different sets of socialization sources influence these accomplishments. In contrast to most existing theories in this area, the present framework does not view the preschool period as necessarily the most definitive one in terms of shaping sex-role orientations, nor are parents viewed as necessarily the most significant source of influence during middle childhood.

The basic developmental sequence suggested by the theory involves three overlapping levels. The first stage involves the learning of child sex roles; the second has as its major aim the anticipation of and preparation for adult sex roles; finally, the third stage involves the enacting and modification of adult sex roles. Each of these levels is further divided into a number of shorter substages where different tasks and/or crises are salient. A major aspect of the theory is that there need not be continuity between the stages in terms of an individual's sex-role orientation. Thus, a child who appears to be very "feminine" at five may not be so considered at 18 years of age.

The overall findings of the present study are complex, variegated, and novel. Some of them do corroborate several expectations generated by this model. Sex-role patterns of children and adults differ considerably from each other, and our results indicate that even young children made this discrimination between appropriate child behavior and anticipated adult sex roles. Factor analyses indicated that items could be classified into two clusters, one corresponding to the child's current interests and activities (which were child-centered), and the other more relevant to his or her anticipated adult roles. These two factors have been labeled "present" and "future" orientations. In accordance with expectation, they are not highly correlated to each other and show few similarities in terms of influence patterning. Variability was also displayed among the various sex-role content areas

which were not highly related to each other. A child might, for example, exhibit flexibility in activity preferences but be very traditional in occupation choices. Thus, it would appear that even young children reveal surprisingly complex and well-delineated cognitive structures with regard to the sex-role area.

The delineations were apparent both with regard to the pattern of scores but in the correlates of these patterns. Children's present sex-role orientations were strongly related to perceptions about their peers. In contrast, media choices were the best predictors of the child's future orientation. Although parental influences correlated somewhat with children's scores (particularly when parental practices were differentiated as to content area), parent scores correlated less than either peer or media influences. This was true for children's perceptions of their parents and self-reports of mothers and fathers. Significant correlations obtained between parental socialization practices (as reported by parents) and their children's scores tended to occur in cross-sex relationships. Mothers seemed to influence their sons more, whereas fathers had more profound effects upon their daughters. This latter finding runs counter to the usual assumptions made by modeling theorists concerning the primary significance of same-sex models. It also suggests that the typical research strategy used in assessing parental input (i.e., comparing children and adolescents to their same-sex parent) may be too limited. This earlier strategy may account for the relative absence of significant parent-child correlations in earlier research (e.g., Minuchin, 1965; Hetherington, 1965; Fling & Manosevitz, 1972; Klecka & Hiller, 1977; Lott, 1978; Sutton-Simon & Menig-Petersen, 1979). It would appear from our results that for young grade school children: (a) parents are generally not as significant as other influences are, and (b) the major socializing parent in the sex roles area may be the opposite-sex one. The importance of the father-daughter relationship has been previously discussed (Biller, 1967) particularly with regard to adolescent females, but to our know-

ledge, no one has suggested that mothers may contribute more to their son's sex-role orientation in middle childhood than fathers do. Psychoanalytic theory, of course, has advanced a number of complicated cross-sex child/parent processes, but these are presumed to occur in early childhood. Moreover, not only is the resolution of these conflicts normally expected to be made before the child enters school; the resolution itself is supposed to strengthen the affective bond and perceived similarity between the child and same-sex parent.

A pervasive finding in the present research is the existence of gender differences. These were also anticipated by the theoretical model which does not assume that males and females necessarily acquire sex roles in comparable ways. Gender differences manifested themselves in a number of ways and were more pronounced in children than in parents. For the most part, females were less stereotyped in almost all content areas, except for their future domestic aspirations. (Some feminists might regard this as more than a minor exception.) Girls also see their peers and parents as more flexible and have less traditional media choices. Many of these findings are in keeping with earlier results about sex differences. It should be noted, however, that sometimes those differences have been negatively interpreted for females. Brown, for example, in his original work on the It Test (Brown, 1954) also found that girls were less sex-typed than boys. Working from a psychoanalytic framework, however, he postulated that this difference was due to inadequate resolution of Oedipal conflicts in girls with consequent weaker identification and superego development.

A result obtained that has not been found in earlier studies concerns the seemingly disparate developmental trends for boys and girls. Although we did not find striking age differences for the sample as a whole, fairly consistent interactions between sex and grade were obtained. These interactions indicated that within the age parameters investigated, older girls were more flexible than younger ones while boys were less flexible than their younger counterparts. This suggests that the social environment of grade school boys grows more condu-

cive to sex-role stereotypy at the same time that girls are exploring many alternatives. Girls, for example, see their friends as becoming more innovative while boys see their peers as becoming more stereotyped. The relationship between age and sex-role stereotypy appears to be different for males and females. If these trends were to continue unabated, male and female adolescents would be extremely mismatched.

Another gender difference emerged which is somewhat more subtle than those previously mentioned. The various correlates of sex-role patterns were far more uniform for boys than for girls. For the most part, the factors which correlate significantly with boys' scores are consistent and in the expected direction (e.g., the socioeconomic levels of both mothers and fathers, attitudes towards feminism of both parents, etc). For girls, however, there are a number of correlations which go contrary to predicted direction, including mothers' socioeconomic level, mothers' attitudes towards feminism, and several teacher attitude variables. Thus, it may be the case that girls are exposed to a more contradictory set of socialization influences, which might be expected to cause more conflict.

A substantial portion of the present research was devoted to how different kinds of influences are related to the flexibility of a child's sex-role orientation. A number of our findings in this area are quite novel. First, we found that the various socialization agents are relatively independent of one another. Even with regard to parental input, it is necessary to distinguish between the child's perceptions about his or her parents and what the parents say they do, for these do not correlate well with each other. Parents, for example, describe themselves as being quite innovative, while their children describe them as being the most traditional influence in their lives (of those asked about). It also seems necessary to obtain input from both parents since their effects are far from uniform.

The utilization of information from all of the sources assessed leads to sur-

prisingly high predictability. Two-thirds of the variability in children's sex-role flexibility scores can be accounted for by knowing their perceptions about parents, peers, media, and about mothers' and fathers' socialization practices. Although the order and subset of predictors differs somewhat for each group, when the sample is considered in its totality, the predictors, in decreasing order of importance, are as follows: (1) peer influence, (2) media, (3) parents as perceived by the child, (4) fathers, and (5) mothers. Knowing about each of these, we can predict with a very high degree of accuracy (more than 90 percent) whether a child will have a traditional or innovative sex-role orientation.

In conclusion, what emerges from the variegated findings obtained is that sex-role acquisition is an enormously complex process, and one which will take considerably more time, data and thought to unravel. The structure of our results indicates that a multidimensional model is necessary and that adequate differentiation of responses is extrememly important for achieving better conceptualizations of sex-role socialization. This differentiation is needed not only with regard to the child's responses, but for parental responses and other areas of social influence as well. The nature of this problem has been posed more eloquently by Bell (1979), who has stated:

> "Research has yet to map parental and child repertoires in each major area of socialization, to measure knowledge and attitudes, to identify the connecting links...Pretty complex? Of course. However if we wish to capture the richness of reciprocal influences in ongoing behavior, our research must be able to encompass this degree of complexity." (p. 822)

Our findings may be viewed as a start in this direction.

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